1. Product and Company Information

**Product Name**  
CPS Resin: Specialty Material

**Product Number**  
CPS Resin: SM412

**Recommeded use of the chemical and restrictions on use**

**Identified uses**  
Photopolymer Resin.

**Uses and exposure**  
Photosensitive material for 3D printing

**Uses advised against**  
No information available

**Company**  
Colorado Photopolymer Solutions, LLC

**Address**  
1880 S. Flatiron Ct., Suite J  
Boulder, CO 80301

**Telephone Number**  
303-520-4107

**Emergency Number**  
303-520-4107

2. Hazard(s) Identification

**Emergency Overview**

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Liquid</th>
<th>Color</th>
<th>Black</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor</td>
<td>Characteristic</td>
<td>Appearance</td>
<td>Black</td>
</tr>
</tbody>
</table>

**Hazard Summary:**  
Causes skin irritation (H315);  
May cause an allergic skin reaction (H317);  
Causes serious eye irritation (H319);  
Toxic to aquatic life with long lasting effects (H411).

**GHS Symbol:**

![GHS Symbols]

**Precautionary Statements - Prevention**

Do not handle until all safety precautions have been read and understood  
Avoid contact with eyes, skin and clothing
Keep container closed when not in use.
Wear protective gloves/protective clothing/eye protection/face protection
Wash face, hands and any exposed skin thoroughly after handling

Precautionary Statements - Response
IF exposed or concerned, get medical advice/attention
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF ON SKIN: Gently wash with plenty of soap and water, Take off contaminated clothing and wash before reuse.
IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

Collect spillage.

Precautionary Statements - Storage
Store locked up
Keep out of reach of children

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC)
None

Other Information
None
Unknown acute toxicity
0% of the mixture consists of ingredient(s) of unknown toxicity

3. Composition/information on Ingredients

Proprietary Formulation

4. First-aid Measures

General: Remove contaminated clothing.

Eye contact: Wash affected eyes for at least 15 minutes under running water with eyelids held open.

Skin contact: Wash thoroughly with soap and water. If irritation develops, seek medical attention.
Ingestion: Rinse mouth and then drink plenty of water. Do not induce vomiting. Seek medical attention if necessary.

Inhalation: If difficulties occur after inhalation, remove to fresh air and seek medical attention.

5. Fire-Fighting Measures

Flash Point: >110°C

Auto-ignition Temperature: Unknown

Flammability: Unknown

Fire Fighting Information: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Emits toxic fumes under fire conditions.

Extinguishing Media: Dry chemical, sand, carbon dioxide, foam, water spray.

6. Accidental Release Measures

In case of spill: Prevent further spill or leak if possible to do so without risk. Ventilate the area. Avoid generation of vapors. Contain and collect spilled chemical with non-combustible absorbent material such as clean sand, earth, diatomaceous earth or non-acidic clay and place into suitable properly labeled containers for prompt disposal.

Personal precautions: Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves. Keep unprotected persons away from chemicals.

Environmental precautions: Keep out of drains and water courses. Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

Methods for cleaning up: Absorb with an inert material and place in a chemical waste container, and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete.

7. Handling and Storage

Precautions for safe handling

Advice on safe handling
Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation. Protect from light.
Conditions for safe storage, including any incompatibilities

**Technical measures/Storage conditions**
Keep container tightly closed in a dry and well-ventilated place, Protect from light.

**Incompatible products**
Amines, Strong oxidizing agents, Strong acids, Strong bases, Oxygen scavengers, Thiosulfates.

### 8. Exposure Controls/ Personal Protection

<table>
<thead>
<tr>
<th>General Measures:</th>
<th>Keep away from foodstuff, beverages, and feed. Wash hands before breaks and at the end of work.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering Controls:</td>
<td>Ensure adequate ventilation. Safety shower and eye bath should be nearby. Recommended use in a chemical fume hood.</td>
</tr>
<tr>
<td>Eye Protection:</td>
<td>Eye and face protection recommended. It is recommended to wear NIOSH or equivalent certified chemical goggles.</td>
</tr>
<tr>
<td>Hand Protection:</td>
<td>Chemical-resistant gloves recommended.</td>
</tr>
<tr>
<td>Skin and Body Protection:</td>
<td>Skin protection recommended.</td>
</tr>
<tr>
<td>Ventilation:</td>
<td>Provide natural or mechanical ventilation to minimize exposure. When dealing with TPO (refer to Section 3) avoid inhalation of dusts and it is recommended to wear NIOSH or equivalent particulate respirator.</td>
</tr>
</tbody>
</table>

### 9. Physical and Chemical Properties

| Appearance: | Black |
| Physical State: | Liquid |
| Odor: | Mild |
| pH Value: | Not determined |
| Melting Point: | Not determined |
| Boiling Point: | Not determined |
| Flash Point: | Not applicable |
| Flammability: | Not applicable |
| Decomposition Temp.: | Not determined |
Danger of explosion: Product does not present an explosion hazard.

10. Stability and Reactivity

Chemical Stability: Stable under recommended storage conditions.

Hazardous Polymerization: Reacts rapidly upon exposure to ultraviolet light or in the presence of inhibitor depleting heat. Polymerization is hazardous and can degenerate into an uncontrolled reaction.

Incompatible materials: Strong oxidizing agents, strong reducing agents, free radical generators, oxygen scavengers, and peroxides.

Hazardous Decomposition Products:
Acrid smoke-fumes, carbon monoxide, carbon dioxide, sulfur oxides, hydrocarbons, nitrogen oxides and perhaps other toxic vapors may be released during a fire involving this product.

11. Toxicological Information

Route of Exposure: Through contact with skin or after permeation of clothing. Inhalation of vapors.

Toxicity
Oral: Estimate 10,000mg/kg

12. Ecological Information

Toxic hazard to aquatic environment with long lasting effects. Avoid exposure to nature resources at all costs.

13. Disposal Considerations

Dissolve or mix with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations. Must not be disposed of together with household garbage.

14. Transport Information

UN-Number
DOT, TDG, ADN, IMDG, IATA: Non-regulated material

CPS SM412 Last Revision Date 1/1/17
UN- Proper Shipping name
DOT, TDG, AND, IMDG, IATA: Non-regulated material

Transport hazard class(es)
DOT, TDG, ADN, IMDG, IATA
Class: Non-regulated material
Packing group
DOT, ADN, IMDG, IATA: Non-regulated material

Environmental hazards: Not applicable
Special precautions for user: Not applicable

15. Regulatory Information

Federal Regulations:
Follow Hazardous Chemical Storage Reporting Requirements
EPCRA 311-312

16. Other Information

Revision Date: 1/1/17

Abbreviations:
GHS-Globally Harmonized System of Classification and Labeling of Chemicals
NIOSH-National Institute for Occupational Safety and Health
HMIS-Hazardous Materials Identification System
EPCRA-Emergency Planning and Community Right-to-Know Act

Disclaimer:

The information and recommendations contained herein are believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Colorado Photopolymer Solutions assumes no responsibility and shall not be held liable for any damage resulting from handling or from contact with the above product.